

REMARKS

Claims 1, 2, 4-8, 10, 11, 13-22 are currently pending in this application. Claims 1, 2, 4-8, 10, 11, 13-22 and 26 are rejected. By this Amendment, claim 26 is cancelled and claims 1, 6, 10 and 13 have been amended. The amended claim set is provided herewith.

§ 103 Rejection of the Claims

Claims 1, 2, 4-8, 10, 11, 13-22 and 26 have been rejected under 35 U.S.C. § 103(a) as obvious over Stultz (US 2002/0156462) in view of Ellinwood, Jr. (US 4,003,379). Applicant respectfully traverses this rejection to the extent such rejection may be considered applicable to the claims as amended. Claim 26 has been cancelled without prejudice and therefore the rejection with respect to that claim is moot. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

The Examiner takes the position that Stultz teaches a method for sensing food intake comprising measuring a parameter, estimating a relationship, and delivering a programmed amount of one or more medications as a function of the sensed physiological parameter. The Examiner cites paragraph 12 of the Stultz reference as disclosing this method for sensing food intake. Applicant has amended claim 1 to further clarify that the sensed physiological parameter is used to estimate a quantity of food consumed by a patient and that that estimate of quantity of food is used to determine a therapy to be delivered to the patient based upon that estimate. The therapy is not delivered as a function of the sensed physiological parameter as the Examiner seems to suggest but as a function of the estimate of the quantity of food consumed. Paragraph 12 of Stultz does not mention estimating food intake of a patient nor is food intake or an estimate of the quantity of food consumed by the patient discussed anywhere in Stultz.

The Examiner acknowledges that Stultz does not teach using the electrical activity of the patient's gastrointestinal tracts but takes the missing disclosure may be found in Ellinwood, which according to the Office Action teaches "sensing the electrical activity of the patient's gastrointestinal tract as a potentially useful measurement to determine the delivery of medication to the patient." While Ellinwood does describe that sensors were available that could be used to detect gastrointestinal motility no mention is made that the detection of gastrointestinal motility

would be used to estimate the amount of food consumed by a patient or that that estimate would be used to determine the delivery of a therapy to that patient. Therefore, Applicant respectfully submits that the combination of Stultz and Ellinwood does not present a *prima facie* case of obviousness of the claims as amended.

Ellinwood describes "prior art" sensors that "sense body changes" and includes as one example a sensor that senses "gastrointestinal motility." In contrast, independent claims 1 and 13 include limitations to "measuring an electrical activity of the patient's gastrointestinal tract", i.e., (claim 1) "a sensor to sense an electrical activity of a gastrointestinal tract of a patient" and (claim 13) "estimating the quantity of food consumed by the patient as a function of the electrical activity of the gastrointestinal tract." The present invention senses electrical activity through electrodes that are "deployed on or proximate to esophagus 12, stomach 114, and intestine 16" in order "to determine the quantity of food consumed by patient 10." See pars. [0018]-[0019] of the published application. The system may then apply therapy to the patient based upon the quantity of food consumed. As discussed above, Ellinwood also lacks any disclosure of a system or method where the sensed electrical activity is used to estimate the quantity of food consumed by the patient or the use of such estimation in the delivery of a therapy.

The combination of Ellinwood and Stultz therefore does not teach, suggest, or disclose all of the elements of the amended claims. Accordingly, Applicant respectfully submits that claims 1 and 13 are patentable over Stultz in view of Ellinwood.

Dependent claims 2, 4-8, 10, 11, and 14-22 depend directly or indirectly from one of independent claims 1 or 13. Accordingly, claims 2, 4-8, 10, 11, and 14-22 incorporate the features of one of claims 1 and 13. These dependent claims are therefore patentable for at least the same reasons stated above. For brevity, Applicant defers (but reserves the right to present) further remarks concerning the dependent claims which are believed separately patentable.

In view of the foregoing amendments, Applicant respectfully requests reconsideration and allowance of the claims as all rejections have been overcome. Notice to this effect is kindly requested.

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The Examiner is respectfully requested to contact the undersigned by telephone at 763.505.0003 or by E-mail at mary.p.bauman@medtronic.com with any questions or comments.

Respectfully submitted,

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